AMENDMENT(S) TO THE SPECIFICATION

Please amend the title as follows:

ARRANGEMENT AND METHOD FOR CONTROLLING COMBUSTION IN A COMBUSTION ENGINE

Please add a paragraph beginning at page 1, line 3:

CROSS REFERENCE TO RELATED APPLICATION

The present application is a 35 U.S.C. §§ 371 national phase conversion of PCT/SE2004/001212, filed 19 August 2004, which claims priority of Swedish Application No. 0302247-2, filed 20 August 2003. The PCT International Application was published in the English language.

Please replace the paragraph beginning at page 1, line 5, with the following rewritten paragraph:

The present invention relates to an arrangement and a method for controlling a combustion engine ~~according to the preambles of claims 1 and 11~~ and particularly relates to strategies for adjusting the combustion process responsive to certain engine conditions.

Please replace the paragraph beginning at page 2, line 11, with the following rewritten paragraph:

This object is achieved with ~~the~~ our arrangement ~~of the kind mentioned in the introduction which is characterised by the features indicated in the characterising part of claim 1~~ varies the combustion process responsive to certain engine conditions. This involves applying, within a subrange, a strategy which entails the effective compression ratio in the cylinder being varied. By suitable variation of the compression ratio in the cylinder, self-ignition of fuel mixtures for different loads can be caused to take place at a substantially optimum crankshaft angle. This strategy may be applied in a subrange within which there are a lowest load at which an optimum compression ratio prevails and a highest load at which the effective compression ratio has been reduced to a minimum acceptable value. Such limitation to a minimum acceptable value is necessary in cases where reducing the effective compression ratio causes the lambda value to drop and hence the acid content

of the exhaust gases to decrease. Lowering the lambda value results in corresponding pressure rises and increased emissions. At higher loads than this strategy caters for, the control unit applies a strategy which entails cooled exhaust gases being led to the combustion chamber. The cooled exhaust gases cause the ignition of the fuel mixture to take place later. This means that the control unit can raise the effective compression ratio in the cylinder and the lambda value, resulting in the possibility of more fuel being supplied to the fuel mixture in the combustion chamber, and in a higher engine load being achieved. This strategy is therefore applicable within a load range which is higher than and adjacent to the load range for the strategy which only entails the effective compression ratio in the cylinder being varied. The control unit applying different strategies within various mutually adjacent subranges makes it possible for self-ignition to be controlled towards an optimum crankshaft angle within a relatively large load range.